Smith & Wesson

MODEL 78G & 79G

CO_2 PISTOL

INSTRUCTION MANUAL

.177 AND .22 CAL. MODELS

Before you use your CO_2 Pistol, read this manual.

It contains valuable information for both the novice and the expert shooter. In addition to complete operating and maintenance instructions, we have provided some basic information on how to use your CO_2 Pistol. If you become familiar with the information in this manual, we are certain that you will enjoy owning and using your Smith & Wesson CO_2 Pistol.

CAUTION

Your Smith & Wesson CO_2 Pistol has been designed to provide the maximum possible safety when used properly. If the pistol is mishandled or used carelessly it can be dangerous.

When using your pistol or any gun always follow these basic safety tips.

1. Never point a gun at anything you don't intend to shoot.
2. Never cock a gun until you are ready to shoot.
3. Never place your finger on the trigger until you are ready to shoot.
4. Always think before you shoot.
5. Always think safety.

FIG. 1

MAJOR PART NAMES

The major parts of your CO_2 pistol are named in Figure 1. If you are not already familiar with these terms, you should learn them. They are used throughout this manual.

FIG. 2

USING YOUR CO_2 PISTOL

1. CO_2 Loading—(Refer to Figure 2) Keeping pistol pointed in a safe direction, remove the piercing assembly from the grip. Place the CO_2 cartridge in the opening as shown. Screw the piercing assembly tightly into place. Hold the pistol in one hand. With the other hand, press down the piercing knob firmly and release. The pistol is now fully charged.

NOTE: Never try to remove the piercing assembly until all the CO_2 is used up. To release any CO_2 remaining in the cartridge, pull the hammer back towards the pellet loading chamber. (Only use 12.5 gram CO_2 cartridges. A starter pack of Smith & Wesson cartridges and pellets is included with your pistol.)

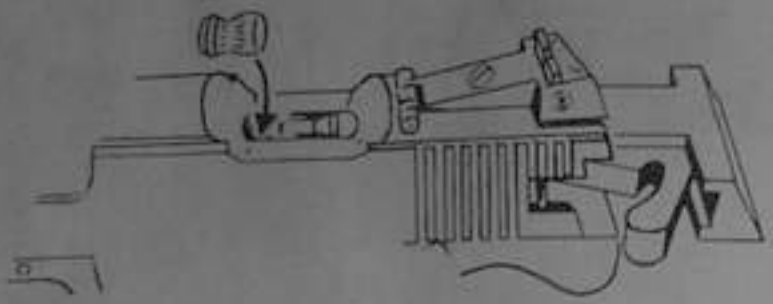


FIG. 3

2. Pellet Loading—(Refer to Figure 3) Keeping muzzle pointed in a safe direction, push in the bolt release lever and pull the bolt all the way back. Place a pellet in the pellet chamber. Push the bolt back to its original position.

CAUTION: Only one pellet may be loaded at a time. Always place the pellet so that the open end faces to the rear.

FIG. 4

3. Cocking—(Refer to Figure 4) Always keep muzzle pointed in a safe direction. To cock the pistol, push the hammer forward until engaged with sear. (See 6 Power Adjustment). The safety should be used if you do not intend to shoot immediately. To make the pistol safe, push the safety to the right side of the pistol.

NOTE: Safety will not engage until the pistol has been cocked.

4. Firing — When you are ready to fire, push the safety off (to the left), hold the pistol in the proper position, take careful aim, and squeeze the trigger. To fire your next shot, repeat steps 2, 3, and 4.

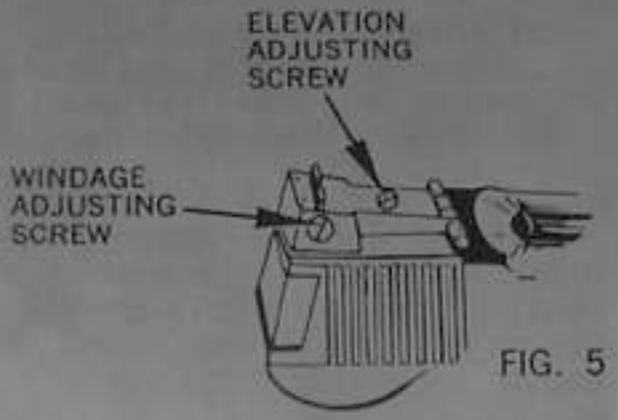


FIG. 5

5. Sight Adjustment — (Refer to Figure 5) To raise the rear sight, turn the elevation screw counter-clockwise. To lower the sight, turn the screw clockwise. Raising the rear sight raises the point of impact. Lowering the rear sight lowers the point of impact.

This sight is also adjustable for windage. Turning the windage screw clockwise moves the sight to the right and counter-clockwise turning moves it to the left. Your sight should be moved in the direction you wish the point of impact to move.

FIG. 6

6. Power Adjustment—(Refer to Figure 6) This CO_2 pistol can be adjusted for high and low power. When the adjustment screw is turned fully clockwise, you are on high power. Turning the screw fully counter-clockwise puts the pistol on low power. Using high power will increase the velocity and range of the pellet. On high power, each CO_2 cartridge will provide approximately 65 shots—low power about 125 shots. In changing power sets always place bolt to open position before making any adjustment.

MODEL 78G/79G VELOCITIES

Model	*Velocity Setting High*	*Velocity Setting Low*
78G	365 F.P.S.	330 F.P.S.
79G	424 F.P.S.	357 F.P.S.

SHOOTING TIPS

Your Smith & Wesson CO_2 Pistol is designed for use both indoors and out. It can help you develop formal target shooting skills or be used simply for the fun of shooting. Whenever you use your CO_2 pistol, always follow the basic rules of safety.

Sighting — (Refer to Figure 8) Line the sights carefully. The top of the front sight should be even with the top of the rear sight, and set in the center of the rear notch. The bullseye should rest on top of the sights.

FIG. 8

Squeeze — Carefully squeeze the trigger with your index finger, keeping the sights aligned and on target. Pulling or yanking the trigger will cause a misalignment of the sights resulting in a possible miss. The squeeze should be applied between the tip and first joint of your finger. Squeeze slowly and carefully at first — speed will develop with practice.

WHERE TO SHOOT

When choosing a place to shoot, make sure you consider safety. It should be free of obstructions and located where people cannot enter unexpectedly. Always select a proper target at which to fire. Avoid ricochets. Never shoot at a flat hard surface or at the surface of water.

Shooting Indoors

A simple range can be set up in your basement, family room, garage, etc. Formal target shooting requires a distance of 33 feet from the firing line to the target. Any distance you find challenging will be satisfactory for informal shooting.

When shooting indoors always have an adequate backstop behind your target. Inexpensive pellet traps may be purchased at any sporting goods store, or a simple trap can be constructed using a cardboard carton, heavy cloth, and a wooden dowel. (See Figure 9.)

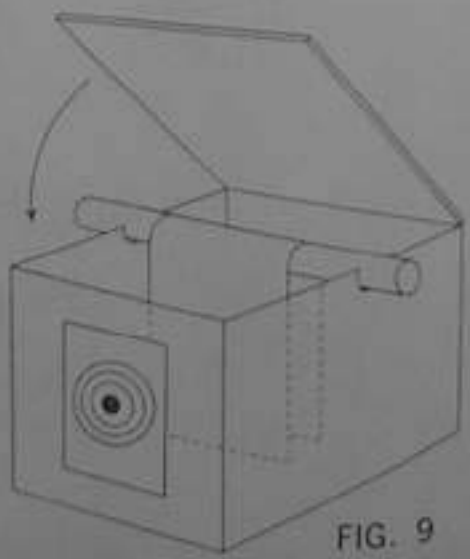


FIG. 9

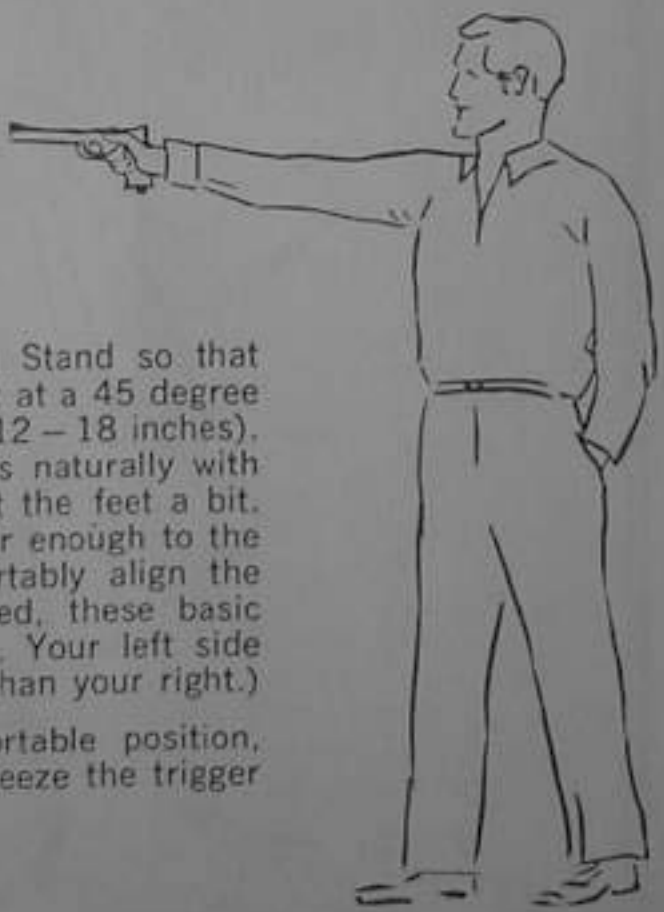
Shooting Outdoors

Almost any shooting arrangement can be used outdoors. In addition to regular target shooting, you will find that firing at tin cans or other simple targets can be quite a lot of fun. High power is recommended for outdoor shooting.

FIG. 10

SHOOTING TECHNIQUES

Grip — (See Figure 10) Grasp the butt of your pistol firmly. The grips on your CO_2 pistol are made to be used with the right or left hand. (Special left-hand grips are not necessary.) Your index finger should rest comfortably on the trigger. The thumb should sit along the side of the grip. The barrel of the pistol should be in a straight line with your arm.



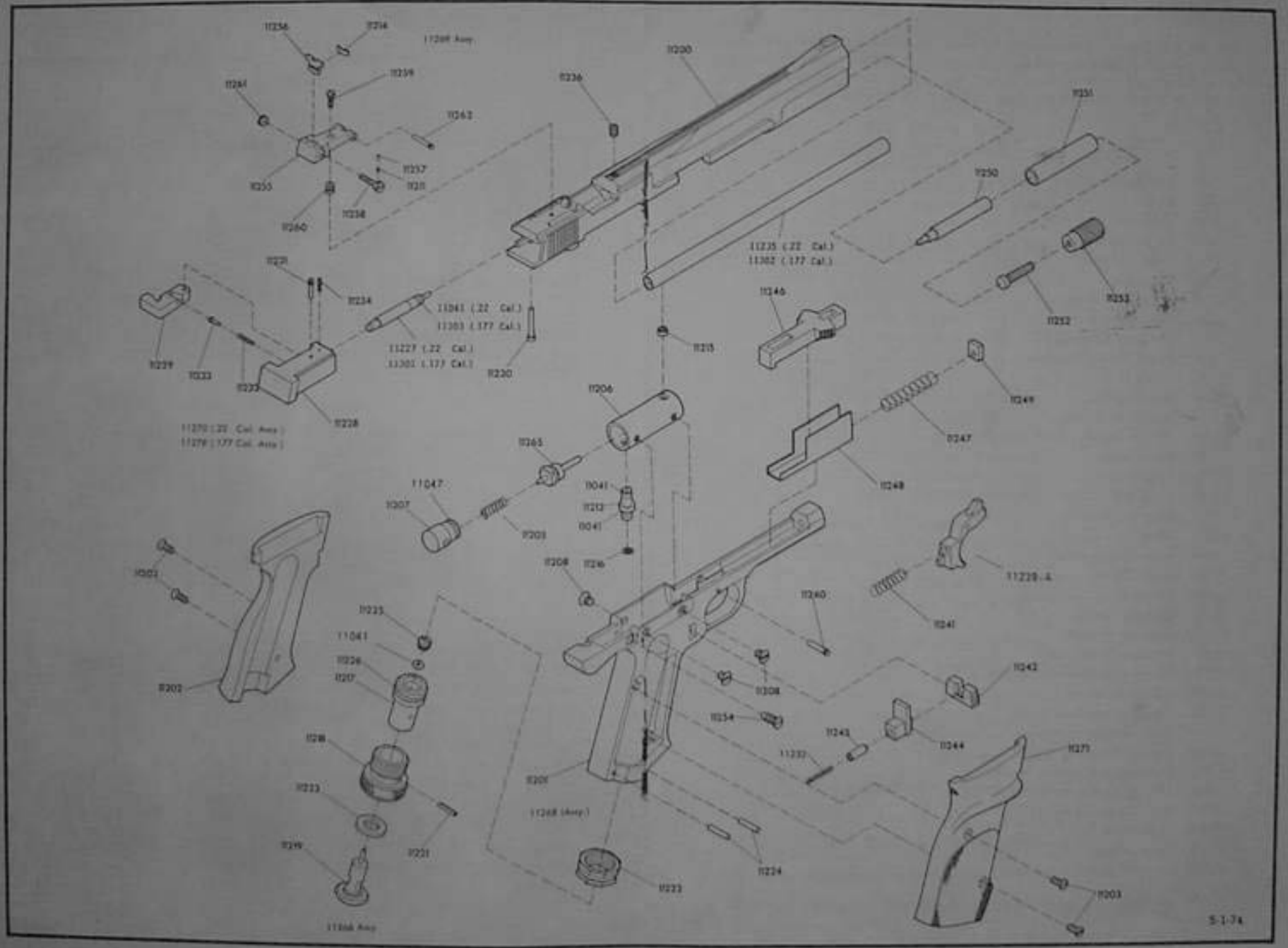
Stand — (Refer to Figure 11) Stand so that your right side faces the target at a 45 degree angle. Spread your feet apart (12 – 18 inches). Raise your arm so that it lines naturally with the target. If it does not, shift the feet a bit. Your head should be turned far enough to the right so that you can comfortably align the sights. (If you are left handed, these basic guidelines should be reversed. Your left side should face the target rather than your right.)

When you are in a comfortable position, sight in on the target and squeeze the trigger carefully.

FIG. 11

SMITH & WESSON MODEL 78G & 79G – CO_2 PISTOL

(Parts Diagram)



PARTS LIST

The parts list and diagram are provided for your convenience if you wish to order replacement parts for your CO_2 pistol. (The diagram is not an assembly diagram. Repairs should only be made by a competent serviceman who is familiar with CO_2 pistols.) Certain items shown on the diagram may be purchased only as complete assemblies.

No.	*Name*
11047	O-Ring (Valve Body Plug)**
11200	Slide
11202	Grip (left)
11203	Grip Screws
11205	Valve Spring
11206	Valve Body
11207	Valve Body Plug
11208	Valve Body Screws
11213	Cartridge Connector
11215	Barrel Valve Connector
11216	Screen
11230	Bolt Stop Pin
11232	Bolt Lever Spring
11235	.22 Cal. Barrel
11236	Barrel Screw
11239A	Trigger
11240	Trigger Pin
11241	Trigger Spring
11242	Safety
11244	Safety Detent Block
11245	Safety Detent
11246	Hammer
11247	Hammer Spring
11248	Hammer Trough
11249	Hammer Spring Pad
11250	Power Adjustment Extension
11251	Extension Sleeve
11252	Power Adjustment Screw
11253	Sleeve Retaining Screw
11254	Casting Assembly Screw
11259	Elevation Adjustment Screw
11041	O-Ring for Connector** (.22 Cal. & .177 Cal.)
11260	Sight Elevation Spring
11262	Sight Pivot Pin
11271	Grip (Right)
11302	.177 Cal. Barrel

No.	Name
11266	Piercing Body Assembly*
includes:	11041 O-Ring Piercing Pin
	11217 Piercing Body
	11218 Piercing Knob
	11219 Piercing Pin
	11221 Piercing Pin Retaining Pin
	11223 Piercing Body Washer
	11225 Body Seat
	11226 O-Ring Piercing Body
11270	(.22 Cal.)
11278	(.177 Cal.) Bolt Assembly*
includes:	11041 O-Ring (.22)
	11303 O-Ring (.177)
	11227 Bolt (.22)
	11301 Bolt (.177)
	11234 Bolt Assembly Pin
	11232 Bolt Lever Spring
	11233 Bolt Lever Spring Pin
	11229 Bolt Lever
	11228 Bolt Block
	11231 Bolt Lever Assembly Pin
11269	Rear Sight Assembly*
includes:	11211 Sight Plunger Spring
	11214 Sight Blade Spring
	11255 Sight Body
	11256 Rear Sight Blade
	11257 Sight Detent Plunger
	11258 Windage Adj. Screw
	11261 Windage Adj. Screw Cap
11265	Valve Assembly*
includes:	11204 Valve
	11210 Valve Seal
	11212 Valve Stem
11268	Frame Assembly*
includes:	11201 Frame
	11222 Piercing Assembly Nut
	11224 Assembly Nut Retaining Pin

*Component parts may not be ordered individually.

**The two O-Rings for the connector must be replaced any time the valve is removed from the pistol.

MAINTENANCE

Keeping your CO_2 Pistol in working order is very simple if you follow these procedures:

Cleaning — It is important that you keep your CO_2 pistol clean. Do not allow dust or dirt to accumulate on any part of the pistol. Always wipe your pistol with a soft lint-free cloth. This will keep the finish looking new and help reduce the chances of malfunction caused by accumulated dust and dirt.

Storage — Always store your pistol in a clean, dry place, out of the reach of children. If you do not have a pistol case, the box your pistol was packed in will serve as a suitable storage carton. It is recommended that the pistol be stored with a full or partially full CO_2 cartridge in place. Always make sure the pellet chamber is empty before putting your pistol away.

CAUTION

Store pistol in a cool place. Heat will cause CO_2 to expand. This may damage your pistol.

Lubrication — The internal parts of this pistol have been lubricated at the factory. They require no further lubrication.

SERVICE

Should your CO_2 pistol require adjustment or repair, we recommend that it be returned to the factory or authorized service center. Under no circumstances should you allow anyone unfamiliar with CO_2 guns to service your pistol.

Charges for service are very reasonable. A letter of instructions should be enclosed with your gun stating the nature of the problem. A quotation listing the full cost of repairs will be sent to you before the repairs are made.

All warranty service must be done at the factory or authorized service centers. For factory warranty service, guns should be shipped **prepaid** to:

Service Department
Smith & Wesson—Sporting Goods Division
2095 Roosevelt Avenue
Springfield, Massachusetts 01101

PARTS

Parts may be ordered through your Smith & Wesson dealer or direct from the factory. On orders sent to the factory there is a minimum charge of one dollar. Please indicate both part name and part number when ordering. Payment must accompany all orders. Massachusetts residents please add 5% sales tax. Address orders to the attention of:

Parts Department
Smith & Wesson—Sporting Goods Division
2095 Roosevelt Avenue
Springfield, Massachusetts 01101

MORE INFORMATION

This booklet has been written to give you a brief introduction to using your CO_2 pistol. If you want more information on CO_2 pistol shooting, it may be obtained from the following:

NATIONAL RIFLE ASSOCIATION
1600 RHODE ISLAND AVENUE, N.W.
WASHINGTON, D.C. 20036

NATIONAL SHOOTING SPORTS FOUNDATION
1075 POST ROAD
RIVERSIDE, CONNECTICUT 06878

FULL NINETY-DAY WARRANTY

Smith & Wesson Air/CO_2 guns are warranted to be free from defects in material and workmanship. Any such defect of which Smith & Wesson is given written notice as provided below within three months and ten days from the date of first purchase by a consumer will be remedied by Smith & Wesson without charge.

This warranty is granted by Smith & Wesson, a division of Bangor Punta Operations, Inc., 2100 Roosevelt Avenue, Springfield, Massachusetts 01101. This warranty, effective December, 1976, supercedes all previous warranty statements.

Warranty claims (in writing), and the gun concerned should be directed (transportation charges prepaid), to the WARRANTY SERVICE DEPARTMENT at the nearest Smith & Wesson Warranty Service Center, addresses of which appear on the lists separately enclosed with each gun. Warranty claims should state the model and serial number of the gun concerned, a description of the difficulty experienced, and the date and place of purchase. It is recommended that shipments be insured by owner, since Smith & Wesson will accept no responsibility for loss or damage in transit.

Transportation and insurance charges for return to owner will be paid by Smith & Wesson if the related claim is a proper claim for warranty work.

Under no circumstances shall Smith & Wesson be responsible for incidental or consequential damages with respect to economic loss or injury to property, whether as a result of breach of express or implied warranty, negligence or otherwise. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Smith & Wesson will not be responsible for the results of careless handling, unauthorized adjustments, defective or improper propellant or ammunition, corrosion, neglect, ordinary wear and tear, or unreasonable use.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

PLEASE NOTE: Air/CO_2 Guns should be considered dangerous devices if mishandled. Guns are surrendered by Smith & Wesson with the express understanding that it assumes no responsibility for re-sale or safe handling under local laws and regulations.

It is requested that the information card packed with each gun be promptly completed upon purchase and returned to Smith & Wesson.

SMITH & WESSON
Springfield, Massachusetts, U.S.A.

SMITH & WESSON CO_2 CARTRIDGES

for use in all Smith & Wesson
CO_2 operated guns
12.5 Gram Cartridges
5 cartridges in a box

SMITH & WESSON PELLETS

.22 Caliber
.177 Caliber

250 PELLETS

SMITH & WESSON MODEL 77A AIR RIFLE

.22 Caliber
Pump Operated
Lever Action
Single Shot

MODEL 80 BB RIFLE

.177 Caliber BB
Auto Loading
CO_2 Rifle

These fine Smith & Wesson products are available from your Smith & Wesson Dealer. For more information see him or write:

Smith & Wesson—Sporting Goods Division
2100 Roosevelt Avenue
Springfield, Massachusetts 01101